Listing of Claims:

Claims 1-26 (Canceled).

27.   (New) An endoscope image sensing apparatus comprising:

an image sensing device for imaging an object to obtain an image signal, and outputting the image signal;

a color matrix section for performing a matrix computation to convert the image signal output from the image sensing device into a color component signal;

a selecting switch for selecting a kind of a light source lamp to be used in irradiation of the object; and

a control section for changing and setting a coefficient of the color matrix section based on the kind of the light source lamp which is selected by the selecting switch.

28.   (New) The apparatus according to claim 27, wherein the color matrix section includes a color adjustment processing section for performing color adjustment processing, and changes a setting associated with conversion performed by the color matrix section based on a gain coefficient set when the color adjustment processing is performed.

29.   (New) The apparatus according to claim 27, wherein the image sensing device comprises a color CCD.

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30.   (New) The apparatus according to claim 27, further comprising a storage section for storing in advance a plurality of coefficients associated with the matrix computation;

wherein the control section changes and sets the coefficient by selecting one of the plurality of coefficients stored in the storage section in accordance with the kind of the light source lamp which is selected by the selecting switch.

31.   (New) The apparatus according to claim 30, wherein the image sensing device comprises a color CCD.

32.   (New) The apparatus according to claim 30, wherein the color matrix section includes a color adjustment processing section for performing color adjustment processing, and changes a setting associated with conversion performed by the color matrix section based on a gain coefficient set when the color adjustment processing is performed.

33.   (New) The apparatus according to claim 32, wherein the image sensing device comprises a one-chip color CCD.

34.   (New) The apparatus according to claim 32, wherein the color adjustment processing comprises white balance processing, and the color adjustment processing section comprises a white balance processing section.

35.   (New) The apparatus according to claim 34, wherein the image sensing device comprises a one-chip color CCD.

36.   (New) An endoscope image sensing apparatus to be used along with a light source lamp for irradiating an object, comprising:

an image sensing device for imaging the object to obtain an

5   image signal, and outputting the image signal;

a color separation circuit for separating the image signal into a luminance component and a chrominance component to generate a luminance signal and a color difference signal;

a color matrix section for performing a matrix computation

10   to convert the luminance and color difference signals output from the color separation circuit into three primary color signals;

a switch provided to be operable by a user; and

a control section for changing and setting a coefficient corresponding to a kind of the light source lamp based on a

15   signal from the switch.

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37.   (New) The apparatus according to claim 36, wherein the switch is provided on a front panel of the apparatus so as to be hand operated by the user.

38.   (New) The apparatus according to claim 36, further comprising a storage section for storing a coefficient table which indicates coefficients to be used by the color matrix section, such that the coefficients respectively correspond to kinds of light source lamps;

wherein the control section selects and reads out one of the coefficients indicated by the coefficient table stored in the storage section, and outputs said one of the coefficients to the color matrix section.

39.   (New) The apparatus according to claim 36, wherein the storage section comprises a ROM.

40.   (New) An apparatus according to claim 36, further comprising a display section for displaying a mode set by the control section;

wherein when a mode corresponding to the kind of the light source lamp is selected by the switch, the display section responds.

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41.   (New) An endoscope image sensing method comprising:

imaging an object to obtain an image signal using an image

sensing device, and outputting the image signal;

performing a matrix computation to convert the image signal

5   output from the image sensing device into a color component signal;

selecting a kind of a light source lamp to be used in

irradiation of the object, and

changing and setting a coefficient to be used in performing

the matrix computation based on the selected kind of the light

10   source lamp.

42.   (New) An endoscope image sensing method, comprising:

imaging an object using an image sensing section to obtain

an image signal, and outputting the image signal;

selecting a kind of a light source lamp to be used in

5   irradiation of the object;

selecting and reading out one of coefficients indicated in a

stored coefficient table, based on the selected kind of the light

source lamp, wherein the coefficients respectively correspond to

kinds of light source lamps; and

10   performing a matrix computation based on said read out one

of the coefficients to convert the image signal into a color

component signal.

43. (New) The method according to claim 41, further comprising:

storing a plurality of settings associated with the matrix computation in advance; and

changing a setting of the matrix computation based on a desired setting selected from a plurality of stored settings.

44. (New) The method according to claim 43, wherein performing the matrix computation comprises performing color adjustment processing, and the method further comprises changing a setting associated with conversion performed while performing the matrix computation based on a gain coefficient set when the color adjustment processing is performed.

45. (New) The method according to claim 44, wherein the color adjustment processing comprises white balance processing.